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DEPUTY REPUBLICAN WHIP

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Dear Colleague,

The United States has the technological and engineering talent and capability to be a world leader in nuclear energy. Unfortunately, we are plagued with a prohibitive regulatory structure that disincentivizes investment and growth throughout the industry. From the front end of the nuclear fuel cycle, through the reactor licensing, to the back end of the fuel cycle and nuclear waste, the United States can modernize its system to propel the U.S. into our nuclear future.

In the United States, nuclear energy is the number one source of emission-free electricity, providing nearly 55 percent of the country's clean energy and 20 percent of the total electricity. At the end of 2021, the United States had 93 operating commercial reactors at 55 nuclear power plants in 28 states. These plants are responsible for delivering reliable, affordable, and clean energy for millions of Americans.

Nuclear energy provides numerous benefits for the United States. From an energy security and reliability perspective, nuclear is among the most reliable sources of power, keeping the grid on when disaster strikes. Given it is our nation's largest emission-free power source, it has enormous climate benefits. It will be impossible for the U.S. to meet its climate goals without nuclear power. Leading in nuclear energy gives the United States geopolitical leverage. A strong civil nuclear sector allows experts in the United States to set international rules and standards, preventing adverse actors from gaining control of potentially dangerous materials. Nuclear power also plays a critical role in our national defense. The U.S. has the world's largest nuclear-powered navy, which is supported by the U.S. commercial nuclear industry. Advanced reactors offer exciting promise for the future of our national defense.

Unfortunately, other countries are outpacing the U.S.'s nuclear development. Adversaries like Russia and China have continued to develop and invest in their nuclear industries. In just the past few years, China has brought 21 reactors online and has 31 additional plants under construction. Around the world, there are also 14 Chinese-designed reactors in various stages of development. Before Russia invaded Ukraine, there were 16 Russian-designed reactors under construction around the world. In contrast, Georgia Power's Plant Vogtle units 3 & 4 are the first US nuclear units constructed in three decades and are the only reactors currently planned to come online.

The lack of development in the U.S. industry is in large part due to a regulatory and licensing structure that disincentivizes private sector investment. To compete with our adversaries, many of whom have entirely government-funded and controlled nuclear entities, we need to modernize our system to invite innovation and growth. The purpose of this Blueprint for Nuclear Innovation and Competitiveness is to jump start conversations for ways the U.S. can advance the nuclear industry by recognizing impediments currently in the industry and offering potential suggestions and reforms. I am hopeful that this document will encourage conversations among Congress and

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various stakeholders on ways to establish a stronger nuclear industry both at home and abroad. I appreciate your consideration of this discussion document and look forward working with you to help America achieve its energy needs.

Jeff Duncan

Member of Congress